

RAW SEQUENCE LISTING DATE: 01/15/2002 PATENT APPLICATION: US/10/024,607 TIME: 18:09:09

Input Set : A:\B08017231.txt

Output Set: N:\CRF3\01152002\J024607.raw

Does Not Comply Corrected Diskette Needed

- 3 <110> APPLICANT: Lee, Richard T. 5 <120> TITLE OF INVENTION: CARDIOVASCULAR DISEASE DIAGNOSTIC AND THERAPEUTIC TARGETS 7 <130> FILE REFERENCE: B0801/7231/ERP/KA
- C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/024,607
- C--> 9 <141> CURRENT FILING DATE: 2001-11-08
 - 9 <150> PRIOR APPLICATION NUMBER: US 60/247,457
 - 10 <151> PRIOR FILING DATE: 2000-11-09
 - 12 <160> NUMBER OF SEQ ID NOS: 33
 - 14 <170> SOFTWARE: FastSEQ for Windows Version 3.0

ERRORED SEQUENCES

```
488 <210> SEQ ID NO: 9
```

- 489 <211> LENGTH: 5028
- 490 <212> TYPE: DNA
- 491 <213> ORGANISM: Rattus norvegicus
- 493 <220> FEATURE:
- 494 <221> NAME/KEY: mRNA
- 495 <222> LOCATION: (1)...(5028)
- 496 <223> OTHER INFORMATION: Lot-1
- 498 <400> SEQUENCE: 9
- 499 gcctggcagg cgggagaacg ctccggagtt gtggccgtgg gcaccgggct cgcggcaaga 60 500 ggagcggaga gcgggcatct cctgagcgcc gtcatggctg cttaggctgc gcctgccagc 120
- 501 ggaccgacgg tgtcgcccga atccggctcg gataggtctg gttggagtct gtgcctgctt 180
- 502 gcttggcgtg tggttgttcc tgcttgattg gcacggtgcc attggcttcg tatttgggaa 240

E--> 503

hard return
300 ccatccatat ctgcctcgca teggaggagt taatettgte tetteteaca ggttegagte eteagacett etgeaggaet 504 coccayctat tgtgctgacc atcoccttcc tgctccggat ctcgcctggc tgctaggctg 420

480 505 tggtgetgee tttteagagt eaggetgtag egaeteeeeg cettegteee ggetgggett 506 aggtggaaca gtggttcatc tcatctcatc agcacttctg aagaagaaag tgtgagaagc 540 507 agaggccatg gctccttttc gctgtcaaaa atgcggcaag tccttcctca ccctggagaa 600 660 508 gttcaccatc cacaattatt cccacaccag ggagcgccca ttcaagtgct ccaagactga 509 gtgtggcaaa gccttcgtct ccaagtataa gctgatgaga cacatggcta cgcactctcc 720 780 510 ccagaagacg caccagtgca ctcattgtga aaagactttc aaccggaagg atcatctgaa 840 511 gaatcacctc cagacccacg atcccaacaa gatgatctac gcctgcgaag attgtggcaa 900 512 gaaataccac accatgctgg gctacaagag gcacatggcc ctgcattcgg ccagcagcgg 960 513 cgatctcacc tgcggcgtct gcaccctgga gctggggagc accgaggtcc tgctggacca 514 cctcaagtct cacgcggaag aaaaggccca ccacgcgccc agggagaaga aacaccagtg 1020 515 cgaccactgc gagagatgct tctacacccg gaaggatgtg cgtcgccacc tggtggtcca 1080 516 cacaggatgc aaggacttcc tgtgtcagtt ctgcgcccag agatttgggc gcaaagacca 1140 1200 517 cctcactcgt cacaccaaga agacccactc ccaggagctg atgcaagaga gcctgcaagc 1260 aggagaatac cagggcggtt accaacccat tgcgcctccg ttccagatca aggctgatcc 519 catgcctcct ttccagttag aaatgccccc cgagagcggg cttgatgggg gcttgcctcc 1320 520 tgagattcat ggtctagtgc ttgcttcccc agaggaggtt ccccagccta tgctgtctat 1380 geogecaatg cagecaatge cagageagee ttteactetg caccetgggg tagtteecte 1440

ctctcctccc ccgatcattc ttcaqqagca taagtacagc ccagttccta cctcttttgc

523 cccqttcqta aqcatqccqa tqaaaqcaqa tctcaaqqqc ttttqcaaca tqqqtctctt

1500

1560



DATE: 01/15/2002

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/024,607 TIME: 18:09:09

Input Set : A:\B08017231.txt

Output Set: N:\CRF3\01152002\J024607.raw

```
524 tgaggaattt cctctgcaag agtgtcagtc gcctgtcaag ttcagtcagt gctttgagat
                                                                              1620
     525 ggctaaggaa gggtttggga aagtcaccct gcccaaagag ctgctggtag atgctgtaaa
                                                                             1680
     526
         tatagccatt cetggetete tggagattte etetetettg gggttetgge agetgeeece
                                                                              1740
     527
                                                                              1800
         tectectece cagaatgget teatgaatgg caccatecet gtgggggeeg gggageeget
     528
         gccccatagg ataacttgtc tggcacagca gcagccacca cctctgctac ctccgccgcc
                                                                              1860
     529
         gccgctgccg ctgccagagc cgctgccaca gccacagctg ccgccacaqt ttcagttgca
                                                                              1920
     530
         gctccagccc cagccccaga tgcagcccca gatgcagctg cagcctctac agctgcagct
                                                                              1980
     531
         gececagety etgececage tycagecega geetgageea gagecagage cagaggaaga
                                                                              2040
     532
         agaggaagaa qaagaaqaq tagaagaaga aqaaqaqatc qaagaaqaaq aaqaagccqa
                                                                              2100
     533 accagaagca gaagaagaag aggaggcaga agacgaagag gaggcagagg aagaggaaga
                                                                             2160
         agagecacag ceagaagaag eecaaatage aatgageget gtgaatatgg geeageeece
                                                                              2220
     535
         gctacccccg acccctcatg ttttcacagc tggcaccaac actgctatcc tgccccattt
                                                                              2280
     536 ccaccacgcg ttcagataaa ttggtttttt aagagggtgc ttctcttctg gaagatgttt
                                                                             2340
         caaacaccaq ttccaqttcc agacatcaqt tacaqtttqa agagaaqcqt tqqaaaaaca
                                                                              2400
     538 ggaatggggt ttctagctta ttgccatgag tagattgaga aaaagaactc tcttaactgc
                                                                             2460
     539
         2520
     540
         tatatatatc atccttagta ttcatgcttt gtaccaaact tagtgagtgc gggcgttctc
                                                                              2580
     541
         cqtaatcqaa ctqcaaqtaq tatcatatta ttaccctqat attqttaqtc tcatattatt
                                                                              2640
         agccttgtat tattctcata taatcaaaac caagatccaa aacatgagct gctaatttgt
     542
                                                                              2700
     543
         aaatatcgtg ttgagtgtta gccgtcgtag tgatgttagc tgcgtagttg cgtgttagca
                                                                              2760
     544
         ctgcctagga agggcacgag ggccaagttg ggcttctccc acttggaaga tgttttgaag
                                                                              2820
     545
         agaagggggt gatctccgta gggcgtccgt aactaggccg tgtgttcttt tcagggaccc
                                                                              2880
     546
                                                                              2940
         gtctaccttc aggattggat gtagtttagt cgctcttctt cttagctcgc tttgtagttt
     547
                                                                              3000
         gtccttctgg tagcctactg tgtgtgtctg tgtgtagctt tataggaaag ttccgtgtga
     548 agctgtcggt gtcttcgttt tcaaaagtga attttaaatg tatttttcaa tatttttcat
                                                                             3060
     549 gtgatgttgt accaatgtga attatgactt cgtttatctt aaagacaaaa ctggttgtca
                                                                             3120
                                                                              3180
         gtcatatctg acaggaagaa agaaatccct gtgggtaggc aagtcaagtg gccaactaat
     551
         gagaagaagc atcaatcgaa agtgttggct gactgggaca ctcatgattc tcacaggact
                                                                              3240
     552 ttgagaaacg tactggaatt aaaaaaaaaa aagcttaagt acattagata agaattttct
                                                                             3300
     553
         ttgcctagct taacctacta cttaagcctc ttaagttctg aagtattgtg atcaaccaat
                                                                              3360
E--> 554
                                                                     3420
     555
         aagtgtaaaa cctaaccctt gaagactctg tatttccttt tttgagactg tatttcccag
                                                                              3540
```

√ tqtqttttqq qaatqtaac aggaaaatgt atctgtagtt gatgaatttc agtccttgtt actttgtatc ccaaqaggtt

556 catgtatacc ctaacctttg gagactctgt attctgtttt tgagactttc cccccgccc 3600 557 ccagcatatg taccccgacc cttgaagact gtatttcgtt tttgagagcg tatttcccag 3660 558 catatataca ctaaccettg aagactetgt attteetttt ttgagactgt attteecage 3720 559 atatatacac taacccttga agactctgta tttccttttt tgagactgta tttcccagca 3780 560 tatatacact aacctttgaa gactctgtat tctgtttttg agaccccccc ccaqcatatg 3840 561 taccctaacc cttgaagact gtatttcgtt tttgagaacg tatttcccag catatataca 3900 ctaacctttg gaagactctg tatttcattt ttgagactgt gtttcttagt atacataccc 3960 563 taacctttga aagactccat ttttgagact tcccccccc cagcatttgt gccctaaccc 4020 ttggaggctt tgtattttt ttttgagact tttccgccag catatataca ctaaccettg 4080 564 565 aagactctgt atttcatttt tgagactttt ttccccagca tatataccgt aacccttgaa 4140 gactetgtat teegtttttg agattttttt ceeteageat atataceeea acetttgaag 4200 567 actotytatt toattittga gactitttcc caqcatatat accotaacct tigaagacto 4260 568 tgtattccat ttttgagatt ttttccctca gcatatatac cctaaccttt gaagactctg 4320 569 tatttcgttt ttgagatttt ttcccccagc atataaacac taacctttga agactctgta 4380 570 tttcattttt gagacttttt tcccagcata tataccctaa cccttgaaga ctctgtaatc 4440 571 tgttttttt tttttttgag actttttccc ccagcatata tacactaacc tttgaagact 4500 572 ctgtattcca ttttttgaga cttttttccc cagcatatat accctaacct ttgaagactc 4560





RAW SEQUENCE LISTING DATE: 01/15/2002 PATENT APPLICATION: US/10/024,607 TIME: 18:09:09

Input Set : A:\B08017231.txt

Output Set: N:\CRF3\01152002\J024607.raw

573 tgtatttcat ttttgagact ttttccccag catatatacc ctaacctttg aagactctgt 4620 574 attecgtttt tgagaccccc ccccggcat gaatacccta atctttgaag actctggtat 4680 575 ttcatttttg agattttttt cccctcagca tatatacact aacctttgta gactctgtat 4740 576 teegtttttg agaettteee eececageat gtataceeta acetttgaag actetgtatt 4800 577 tocagoattt gtaccotacc cttgaagact ctgtatttcc cagoatttgt accotaaccc 4860

E--> 578

ttgaagaccc tgtatttcgt ttgtaagact tttccccagc atatatatcc tacatataat 4920 Aaacgctaag catctagcaa

1721 <210> SEQ ID NO: 32

1722 <211> LENGTH: 6324

1723 <212> TYPE: DNA

1724 <213> ORGANISM: Homo sapiens

1726 <220> FEATURE:

1727 <221> NAME/KEY: mRNA

1728 <222> LOCATION: (1)...(6324)

1729 <223> OTHER INFORMATION: human p35srj

1731 <400> SEQUENCE: 32

1732 gatcaagtta acatgaggcc agtaggagaa gccctaatcc aaaaggacta gagtccttgt 60 1733 caaaagggga actttggaca cagagataca catacagggg ggcggggggt ggaaaacgtc 120 1734 acatgaagat gaaggtgggg atcagtgtga tgcatctaca agtcaaggga caccaaagat 180 1735 tgccgggaaa ccaccaaaag ccaggaaaga gacacggaat agattetete teacggtett 240 1736 cagaaccaac cctgccaaca acttggcctt gtacctctag cctccagaac tgtgagacaa 300 1737 taatgttttg ttgtttaaag cttgatcagc cttaagtttg tattagactg gtgcaaaagt 360 1738 aattacagtt ttcgccattg ctttcaatgg caaaaatcac aattactttt qcaccaacct 420 1739 aaatagtact gtgttatggc agctctggga aatgaataca accattcagt gctgtgaggg 480 1740 ccacagacag atcacttgct cgctcaccca ggttcacggg ataaaccctg gttatacgga 540 1741 acttetggga geeetgggtt actgtaagtg ceeectaaet ggaeteeetg ttteetgtet 600 1742 tactttetet aaccattete cacageactg ceetgatett tetaaaatee aaatetttee 660 1743 tatctcatgg cttcacaagc ttttacctgc ctcccaatgt ctttgggata cagcaaaatt 720 1744 teteagettg aggecaeaat gecettggea teeggeeeca geatatttet eeaacettat 780 1745 ttctctcatc tttgcattca ctccctagcc atacattttc taccccactc ctaatgggac 840 1746 caaacttcca ttcatcctga ggcctccact tagtcaccat ctccaccgga aagccttccc 900 1747 aaaqcaccca ggagggggt aggtgtccct cctatgtgct ctccaaaqcc ctttccttca 960 1748 atgcctttgt ggcatttatc acagtgtgtt caaggcctgt ttgtcagttt tctccctgtg 1020 1749 accatgagtt cctatcttgt ttgtatctcc aggcaccaag aaagcacttg gcacttggag 1080 1750 gacattcagt ggacggatga gaataaatga acaaagcatg ccatgttcca accagctggt 1140 1751 cccagaacta ttttgttctc ctttaaggga tgggggatgg gcaggtgacc tttccaggga 1200 1752 tttcccaata gtaggtagaa ccactggagc tggatggagc tccacctttc cttagtggtt 1260 1753 gcaagaggaa tttagattag acattcaaaa gctgtttctt gtgtcgaaag acacttgcag 1320 1754 tacaaagaag ggaaagtaaa caatcccgcg atttttcagg ttgggtttta ccaatatttt 1380 1755 agaatctgtt tttttatagg aagtggcccc ttcaggtatc caagcctctg atacggtaaa 1440 1756 ctgcatgtcc tgacctacag gtaaaggtqq tgqqagqtta qqaqaataqq qaattqttqc 1500 1757 aactaacaat gcaatgtgtc atgtgcccqt atctctaaaa aqtaaatatt tttqaqqttt 1560 1758 aaaaattatt tgcctgcacg gtttgccgga gagcctggaa gaggaaagaa gacaagacac 1620 1759 aaagtaacaa catttacaaa aatatgcctg actaggaaaa gacagagggg tcatagacga 1680 1760 aaataatcag gattgggtct cttttgcaaa ttcctgaacg gggaaatgta tcagaatttc 1740 1761 cagtcctcaa gaaacagggc ctttaaaaaqt cttqtqtqca aqaaqqqqqa aaaaqacqaq 1800 1762 gggggggggg ggaggcggac tegetetteg cageaggaag tetteaatgg etategagtt 1860 1763 atgaagaaac aactgcccag aagtccttat tcggagcgct aaactcgatt ttaccacata 1920 1764 aagagcaatg taaaagctca gaacagcccc atcatggtgt tggggaaaca actcggcttc 1980 1765 cccatgtgag aaagccagag agctccgact tggtagtagc ccagacctgt gttaggggtt 2040





RAW SEQUENCE LISTING DATE: 01/15/2002 PATENT APPLICATION: US/10/024,607 TIME: 18:09:09

Input Set : A:\B08017231.txt

Output Set: N:\CRF3\01152002\J024607.raw

		gtcaatgaac					2100
		ttatcgccca					2160
		tgcgcgtggt					2220
		caaagcgatt					2280
		ccctcaaatt					2340
1771	ccgtcaggca	gagcccggag	ggaggctctg	caagtttgta	cacaccccca	cctcccggat	2400
1772	ccagggcaac	agcagaagca	agtaactgtg	tatgtgcaaa	aaggtggatc	tggggacgag	2460
1773	gatcgctgag	tttgtttaca	gagcagagac	gcctcagctc	ggatgccaaa	gctaccaaga	2520
1774	gctgcaaacg	caaacttagc	agaagcacac	gtaccccggg	agcggcaggc	gggcccgaaa	2580
1775	gcgcggactg	gaattccagg	gcgcgggagc	gggggtggcc	gggccctcga	gcgcgctccg	2640
1776	tccacctgca	gcggctgccc	ctccccgccc	ccagctcctg	tccttgaaag	gagtggagga	2700
1777	aaaaaatgca	tctacaagcg	gtgatctaga	gtaggtctac	ccactgcccg	tatgaaaaca	2760
1778	caaaggcaca	gcctaggaag	gcgcgctcag	gaaagggcgc	attatttgtc	cgggtcttta	2820
1779	aaacccaact	cgaggaagca	cagccattct	tcgctgcctg	tggaagcttt	tgcaaaaccg	2880
1780	gggaggcaca	agggcactct	ggagggcggg	gggcgctggg	cgagtcccct	tttcccgtag	2940
1781	agagcggggc	agatcgctag	gtgaaccgag	tgagaaagct	gggggtgggg	tagatccagc	3000
1782	ctgagggggg	cggtgagctc	tcctcgtggc	tatcccggca	ggctctacct	tcgggcgggg	3060
		ggattttccc					3120
		accagagtcg					3180
		acgtgccgcg					3240
1786	cgcggtgttc	cggaatccgc	gtcttggcgc	cgcccgccct	ggaggctctc	gctccgcctt	3300
		ctatattaac					3360
	-	gtcctgccga			_		3420
		ccagcggccg					3480
		ggaaggtccc					3540
		ttcggagcag					3600
		ttgccagccc					3660
		gggaataaca					3720
		cgcagcaggg					3780
		ggctcgggtc					3840
		ttatgagtgg					3900
		tgggggtggt					3960
		aagtggggtg					4020
		acttccagga					4080
	_	cggcaccaat					4140
		ccccatcac					4200
		catacactac					4260
		ggggactgtg					4320
		ctcccagttc					4380
		gctgcagaag					4440
		gccggatttg					4500
1807	acttccgaga	ttgcaacccc	aagcacagcg	acaacaacaa	cacccccaac	aactcaaaca	4560
		cccggcggc					4620
		cagcggcagc					4680
		caatgtcata					4740
		gggtttggac					4800
		tatgacggac					4860
		ccccggcgaa					4920
		tagacacagt					4980
TOT4	aucaccocc	cagacacage	accidante	ccagaccccg	adayyeeeya	gaacceggaa	4500





RAW SEQUENCE LISTING DATE: 01/15/2002 PATENT APPLICATION: US/10/024,607 TIME: 18:09:09

Input Set : A:\B08017231.txt

Output Set: N:\CRF3\01152002\J024607.raw

1816 teetgtttt gtttegttt tgtageettg acatteacee acetecetta tgtagttgaa 5100 1817 atatetaget aacttggtet ttttegttgt ttgttttae teettteeet cactttetee 5160 1818 agtgeteace tgttagatat taatettgge aaactgetta atettgtgga tttttgtagat 5220 1819 ggttteaaat gactgaactg catteagatt taegagtgaa aggaaaaatt geattagttg 5280 1820 gttgcatgaa ettegaaggg cagatattae tgcacaacet gecatetege tteattttt 5340 1821 taactatgea tttgagtaea gactaattt taaaatatge taaactggaa gattaaacag 5400 1822 atggggeea aactgttetg gateaggaaa gteatactgt teacetteaa gttggetgte 5460 1823 ceeceegeeg eeceeceeca eeceatatg taeaaggata aatagggtg ggaatgtegt 5520 1824 cagtggeaaa cattteacag attttatt tgtttetgte tteaacatt ttgacactgt 5580 1825 getaatagtt atatteagta catgaaaaga taetactgtg ttgaaageet tttaggaaat 5640 1826 tttgacagta ttttgtaca aaacatttt ttgaaaaaat acettgttaat ttattetatt 5700 1827 ttaatttgee aatgteaata aaaagttaag aaataacttg ttttetagaa gtcatttggg 5760 1828 ggtggttgt eecettggtg getttttee eecegtettt gagttgaaca etattgatga 5820 1829 gagtaageat teeaaaggat aattacaaga acactaaace aggteaage gagetaage 5880 1830 ggagageagg atttaacata atggeaaag tgeteattg ttateattgt aacatgeet 5880 1831 ttggtgget ttaateaaaa getgeaaagt tgtcactget tttttttt tettaattge 6000 1832 cateaataca aggtaaaaaa aateaaggt tteegttaat acetgatea actaetttee 6060 1833 aatgggeagg aggeaaaaaa aacacaggt tteegttaat acetgatea actaettaaa 6120 1834 tagaggtaga ttggaataat acactgattg attgatgggt ggeattaaat acactgataa 6120 1835	1815	acaaagtaaa	ctataaactt	gtacaaattg	gttttaaaaa	aaattgctgc	cactttttt	5040
1818 agtgctcaac tgttagatat taatcttggc aaactgctta atcttgtgga ttttgtagat 5220 1819 ggtttcaaat gactgaactg cattcagatt tacgagtgaa aggaaaaatt gcattagttg 5280 1820 gttgcatgaa cttcgaaggg cagatattac tgcacaaact gccatctcgc ttcattttt 5340 1821 taactatgca tttgagtaca gactaatttt taaaatatgc taaactggaa gattaaacag 5400 1822 atgtgggcca aactgttctg gatcaggaaa gtcatactgt tcactttcaa gttggctgtc 5460 1823 ccccccgccg ccccccca cccccatatg tacagatgat aatagggtgt ggaatgtcgt 5520 1824 cagtggcaaa catttcacag atttttattt tgtttctgtc ttcaacattt ttgacactgt 5580 1825 gctaatagtt atattcagta catgaaaaga tactactgtg ttgaaagcct tttaggaaat 5640 1826 tttgacagta tttttgtaca aaacattttt ttgaaaaaat acttgttaat ttattctatt 5700 1827 ttaatttgcc aatgtcaata aaaagttaag aaataacttg ttttctagaa gtcatttggg 5760 1828 ggtggttgtt ccctttggtg gcttttttcc ccccgtcttt gagttgaaca ctattgatga 5820 1830 ggagagcagg atttaacata attggcataa tgctcattg ttatcattgt aacatgcctc 5940 1831 ttggtgtgct ttaatcaaaa gctgcaaagt tgtcactgct ttttttttt tcttaattgc 6000 1832 catcatatca agtgtactcc agagttagaa aggtttgcaa tactcaacat tatcttttc 6060 1833 aatgggcagg aggcaaaaaa aatcaagtgt ttctgtttat acctgattca actacttaaa 6120 1834 tagaggtaga ttggaataat acactgattg attgatgggt ggcattaaat ataaatctac 6180	1816	tcctgttttt	gtttcgtttt	tgtagccttg	acattcaccc	acctccctta	tgtagttgaa	5100
1819 ggtttcaaat gactgaactg cattcagatt tacgagtgaa aggaaaaatt gcattagttg 1820 gttgcatgaa cttcgaaggg cagatattac tgcacaaact gccatctcgc ttcattttt 1821 taactatgca tttgagtaca gactaattt taaaatatgc taaactggaa gattaaacag 1822 atgtgggcca aactgttctg gatcaggaaa gtcatactgt tcactttcaa gttggctgtc 1823 ccccccgccg cccccccca ccccatatg tacagatgat aatagggtgt ggaatgtcgt 1824 cagtggcaaa catttcacag attttattt tgttctgtc ttcaacatt ttgacactgt 1825 gctaatagtt atattcagta catgaaaaga tactactgtg ttgaaagcct tttaggaaat 1826 tttgacagta tttttgtaca aaacatttt ttgaaaaaat acttgttaat ttattctatt 1827 ttaatttgcc aatgtcaata aaaagttaag aaataacttg ttttctagaa gtcatttggg 1828 ggtggttgtt ccctttggtg gctttttcc ccccgtcttt gagttgaaca ctattgatga 1829 gagtaagcat tccaaaggat aaattacagg acactaaaac aggtcatgat gagcttaagc 1830 ggagagcagg atttaacata attggcataa tgcttcattg ttatcattgt aacatgcctc 1831 ttggtgtgct ttaatcaaaa gctgcaaagt tgtcactgct tttttttt tcttaattgc 1833 aatgggcagg aggcaaaaaa aatcaagtgt ttctgttat acctgattca actacttaaa 1834 tagaggtaga ttggaataat acactgattg attgatgggt ggcattaaat ataaatctac 1834 tagaggtaga ttggaataat acactgattg attgatgggt ggcattaaat ataaatctac 1834 tagaggtaga ttggaataat acactgattg attgatgggt ggcattaaat ataaatctac 1830 ggcagaggaa acctaaaaa acctgattg acctgattca actacttaaa 1834 tagaggtaga ttggaataat acactgattg attgatgggt ggcattaaat ataaatctac 1830 ggcagaagaa ttggaataat acactgattg acctgattca acctactaaa 1834 tagaggtaga ttggaataat acactgattg attgatgggt ggcattaaat ataaatctac 1830 ggcagaagaa ttggaataat acactgattg acctgattaaa acctgattaaa acctgattaaa 1834 tagaggtaga ttggaataat acactgattg attgatgggt ggcattaaat ataaatctac 1830 ggcagaagaa ttggaataat acctgattg acctgattaaat ataaatctac 1831 tagaggtaga ttggaataat acctgattg acctgattga acctgattaaat acctgattaaa acctgattga 1830 ggcagaagaa ttggaataat acctgattga acctgattgaa acctgattaaat acctgattaaa 1830 ggcagaaaaaa acctgattgaa acctgattgaa acctgattaaat acctgattaaa acctgattgaaaaaaaaaa	1817	atatctagct	aacttggtct	ttttcgttgt	ttgtttttac	tcctttccct	cactttctcc	5160
1820 gttgcatgaa cttcgaaggg cagatattac tgcacaaact gccatctcgc ttcattttt 5340 1821 taactatgca tttgagtaca gactaatttt taaaatatgc taaactggaa gattaaacag 5400 1822 atgtgggcca aactgttctg gatcaggaaa gtcatactgt tcactttcaa gttggctgtc 5460 1823 cccccgccg ccccccca ccccatatg tacagatgat aatagggtgt ggaatgtcgt 5520 1824 cagtggcaaa catttcacag attttattt tgtttctgtc ttcaacattt ttgacactgt 5580 1825 gctaatagtt atattcagta catgaaaaga tactactgtg ttgaaagcct tttaggaaat 5640 1826 tttgacagta tttttgtaca aaacattttt ttgaaaaaat acttgttaat ttattctatt 5700 1827 ttaatttgcc aatgtcaata aaaagttaag aaataacttg ttttctagaa gtcatttggg 5760 1828 ggtggttgt ccctttggtg gctttttcc ccccgtcttt gagttgaaca ctattgatga 5820 1829 gagtaagcat tccaaaggat aaattacagg acactaaaac aggtcatgat gagcttaagc 5880 1830 ggagagcagg atttaacata attggcataa tgcttcattg ttatcattgt aacatgcctc 5940 1831 ttggtgtgct ttaatcaaaa gctgcaaagt tgtcactgct ttttttttt tcttaattgc 6000 1832 catcatatca aggtcaaaaaa aatcaagtgt ttctgttat acctgattca actacttaaa 6120 1834 tagaggtaga ttggaataat acactgattg attgatgggt ggcattaaat ataaatctac 6180	1818	agtgctcaac	tgttagatat	taatcttggc	aaactgctta	atcttgtgga	ttttgtagat	5220
1821 taactatgca tttgagtaca gactaatttt taaaatatgc taaactggaa gattaaacag 5400 1822 atgtgggcca aactgttctg gatcaggaaa gtcatactgt tcactttcaa gttggctgtc 5460 1823 cccccgccg ccccccca cccccatatg tacagatgat aatagggtgt ggaatgtcgt 5520 1824 cagtggcaaa catttcacag atttttattt tgtttctgtc ttcaacattt ttgacactgt 5580 1825 gctaatagtt atattcagta catgaaaaga tactactgtg ttgaaagcct tttaggaaat 5640 1826 tttgacagta tttttgtaca aaacattttt ttgaaaaaat acttgttaat ttattctatt 5700 1827 ttaatttgcc aatgtcaata aaaagttaag aaataacttg ttttctagaa gtcattggg 5760 1828 ggtggttgtt ccctttggtg gctttttcc ccccgtcttt gagttgaaca ctattgatga 5820 1829 gagtaagcat tccaaaggat aaattacagg acactaaaac aggtcatgat gagcttaagc 5880 1830 ggagagcagg atttaacata attggcataa tgcttcattg ttatcattgt aacatgcctc 5940 1831 ttggtgtgct ttaatcaaaa gctgcaaagt tgtcactgct ttttttttt tcttaattgc 6000 1832 catcatatca agtgtactcc agagttagaa aggtttgcaa tactcaacat tatcttttc 6060 1833 aatgggcagg aggcaaaaaa aatcaagtgt ttctgtttat acctgattca actactaaa 6120 1834 tagaggtaga ttggaataat acactgattg attgatgggt ggcattaaat ataaatctac 6180	1819	ggtttcaaat	gactgaactg	cattcagatt	tacgagtgaa	aggaaaaatt	gcattagttg	5280
1822 atgtgggcca aactgttctg gatcaggaaa gtcatactgt tcactttcaa gttggctgtc 5460 1823 ccccccgccg ccccccca ccccatatg tacagatgat aatagggtgt ggaatgtcgt 5520 1824 cagtggcaaa catttcacag atttttatt tgtttctgtc ttcaacatt ttgacactgt 5580 1825 gctaatagtt atattcagta catgaaaaga tactactgtg ttgaaagcct tttaggaaat 5640 1826 tttgacagta tttttgtaca aaacatttt ttgaaaaaat acttgttaat ttattctatt 5700 1827 ttaatttgcc aatgtcaata aaaagttaag aaataacttg ttttctagaa gtcatttggg 5760 1828 ggtggttgtt ccctttggtg gctttttcc ccccgtcttt gagttgaaca ctattgatga 5820 1829 gagtaagcat tccaaaggat aaattacagg acactaaaac aggtcatgat gagcttaagc 5880 1830 ggagagcagg atttaacata attggcataa tgcttcattg ttatcattgt aacatgcctc 5940 1831 ttggtgtgct ttaatcaaaa gctgcaaagt tgtcactgct ttttttttt tcttaattgc 6000 1832 catcatatca agtgtactcc agagttagaa aggtttgcaa tactcaacat tatcttttc 6060 1833 aatgggcagg aggcaaaaaa aatcaagtgt ttctgtttat acctgattca actactaaa 6120 1834 tagaggtaga ttggaataat acactgattg attgatgggt ggcattaaat ataaatctac 6180	1820	gttgcatgaa	cttcgaaggg	cagatattac	tgcacaaact	gccatctcgc	ttcattttt	5340
1823 ccccccgccg cccccccca ccccatatg tacagatgat aatagggtgt ggaatgtcgt 1824 cagtggcaaa catttcacag attttatt tgtttctgtc ttcaacatt ttgacactgt 1825 gctaatagtt atattcagta catgaaaaga tactactgtg ttgaaagcct tttaggaaat 1826 tttgacagta tttttgtaca aaacatttt ttgaaaaaat acttgttaat ttattctatt 1827 ttaatttgcc aatgtcaata aaaagttaag aaataacttg ttttctagaa gtcatttggg 1828 ggtggttgtt ccctttggtg gctttttcc ccccgtcttt gagttgaaca ctattgatga 1829 gagtaagcat tccaaaggat aaattacagg acactaaaac aggtcatgat gagcttaagc 1830 ggagagcagg atttaacata attggcataa tgcttcattg ttatcattgt aacatgcctc 1831 ttggtgtgct ttaatcaaaa gctgcaaagt tgtcactgct ttttttttt tcttaattgc 1832 catcatatca agtgtactcc agagttagaa aggtttgcaa tactcaacat tatcttttc 1833 aatgggcagg aggcaaaaaa aatcaagtgt ttctgtttat acctgattca actacttaaa 1834 tagaggtaga ttggaataat acactgattg attgatgggt ggcattaaat ataaatctac 1830	1821	taactatgca	tttgagtaca	gactaatttt	taaaatatgc	taaactggaa	gattaaacag	5400
1824 cagtggcaaa catttcacag attttatt tgtttctgtc ttcaacatt ttgacactgt 5580 1825 gctaatagtt atattcagta catgaaaaga tactactgtg ttgaaagcct tttaggaaat 5640 1826 tttgacagta tttttgtaca aaacatttt ttgaaaaaat acttgttaat ttattctatt 5700 1827 ttaatttgcc aatgtcaata aaaagttaag aaataacttg ttttctagaa gtcatttggg 5760 1828 ggtggttgtt ccctttggtg gctttttcc ccccgtcttt gagttgaaca ctattgatga 5820 1829 gagtaagcat tccaaaggat aaattacagg acactaaaac aggtcatgat gagcttaagc 5880 1830 ggagagcagg atttaacata attggcataa tgcttcattg ttatcattgt aacatgcctc 5940 1831 ttggtgtgct ttaatcaaaa gctgcaaagt tgtcactgct ttttttttt tcttaattgc 6000 1832 catcatatca agtgtactcc agagttagaa aggtttgcaa tactcaacat tatcttttc 6060 1833 aatgggcagg aggcaaaaaa aatcaagtgt ttctgtttat acctgattca actacttaaa 6120 1834 tagaggtaga ttggaataat acactgattg attgatgggt ggcattaaat ataaatctac 6180	1822	atgtgggcca	aactgttctg	gatcaggaaa	gtcatactgt	tcactttcaa	gttggctgtc	5460
1825 gctaatagtt atattcagta catgaaaaga tactactgtg ttgaaagcct tttaggaaat 5640 1826 tttgacagta tttttgtaca aaacatttt ttgaaaaaat acttgttaat ttattctatt 5700 1827 ttaatttgcc aatgtcaata aaaagttaag aaataacttg ttttctagaa gtcatttggg 5760 1828 ggtggttgtt ccctttggtg gctttttcc ccccgtcttt gagttgaaca ctattgatga 5820 1829 gagtaagcat tccaaaggat aaattacagg acactaaaac aggtcatgat gagcttaagc 5880 1830 ggagagcagg atttaacata attggcataa tgcttcattg ttatcattgt aacatgcctc 5940 1831 ttggtgtgct ttaatcaaaa gctgcaaagt tgtcactgct ttttttttt tcttaattgc 6000 1832 catcatatca agtgtactcc agagttagaa aggtttgcaa tactcaacat tatcttttc 6060 1833 aatgggcagg aggcaaaaaa aatcaagtgt ttctgttat acctgattca actacttaaa 6120 1834 tagaggtaga ttggaataat acactgattg attgatgggt ggcattaaat ataaatctac 6180	1823	cccccgccg	cccccccca	ccccatatg	tacagatgat	aatagggtgt	ggaatgtcgt	5520
1826 tttgacagta tttttgtaca aaacatttt ttgaaaaaat acttgttaat ttattctatt 5700 1827 ttaatttgcc aatgtcaata aaaagttaag aaataacttg ttttctagaa gtcatttggg 5760 1828 ggtggttgtt ccctttggtg gctttttcc ccccgtcttt gagttgaaca ctattgatga 5820 1829 gagtaagcat tccaaaggat aaattacagg acactaaaac aggtcatgat gagcttaagc 5880 1830 ggagagcagg atttaacata attggcataa tgcttcattg ttatcattgt aacatgcctc 5940 1831 ttggtgtgct ttaatcaaaa gctgcaaagt tgtcactgct ttttttttt tcttaattgc 6000 1832 catcatatca agtgtactcc agagttagaa aggtttgcaa tactcaacat tatcttttc 6060 1833 aatgggcagg aggcaaaaaa aatcaagtgt ttctgtttat acctgattca actacttaaa 6120 1834 tagaggtaga ttggaataat acactgattg attgatgggt ggcattaaat ataaatctac 6180	1824	cagtggcaaa	catttcacag	atttttattt	tgtttctgtc	ttcaacattt	ttgacactgt	5580
1827 ttaatttgcc aatgtcaata aaaagttaag aaataacttg ttttctagaa gtcatttggg 5760 1828 ggtggttgtt ccctttggtg gctttttcc ccccgtcttt gagttgaaca ctattgatga 5820 1829 gagtaagcat tccaaaggat aaattacagg acactaaaac aggtcatgat gagcttaagc 5880 1830 ggagagcagg atttaacata attggcataa tgcttcattg ttatcattgt aacatgcctc 5940 1831 ttggtggct ttaatcaaaa gctgcaaagt tgtcactgct ttttttttt tcttaattgc 6000 1832 catcatatca agtgtactcc agagttagaa aggtttgcaa tactcaacat tatcttttc 6060 1833 aatgggcagg aggcaaaaaa aatcaagtgt ttctgtttat acctgattca actacttaaa 6120 1834 tagaggtaga ttggaataat acactgattg attgatggt ggcattaaat ataaatctac 6180	1825	gctaatagtt	atattcagta	catgaaaaga	tactactgtg	ttgaaagcct	tttaggaaat	5640
1828 ggtggttgtt ccctttggtg gctttttcc ccccgtcttt gagttgaaca ctattgatga 5820 1829 gagtaagcat tccaaaggat aaattacagg acactaaaac aggtcatgat gagcttaagc 5880 1830 ggagagcagg atttaacata attggcataa tgcttcattg ttatcattgt aacatgcctc 5940 1831 ttggtgtgct ttaatcaaaa gctgcaaagt tgtcactgct tttttttttt	1826	tttgacagta	tttttgtaca	aaacattttt	ttgaaaaaat	acttgttaat	ttattctatt	5700
1829 gagtaagcat tccaaaggat aaattacagg acactaaaac aggtcatgat gagcttaagc 5880 1830 ggagagcagg atttaacata attggcataa tgcttcattg ttatcattgt aacatgcctc 5940 1831 ttggtgtgct ttaatcaaaa gctgcaaagt tgtcactgct ttttttttt tcttaattgc 6000 1832 catcatatca agtgtactcc agagttagaa aggtttgcaa tactcaacat tatcttttc 6060 1833 aattggcagg aggcaaaaaa aatcaagtgt ttctgtttat acctgattca actacttaaa 6120 1834 tagaggtaga ttggaataat acactgattg attgatggt ggcattaaat ataaatctac 6180	1827	ttaatttgcc	aatgtcaata	aaaagttaag	aaataacttg	ttttctagaa	gtcatttggg	5760
1830 ggagagcagg atttaacata attggcataa tgcttcattg ttatcattgt aacatgcctc 5940 1831 ttggtgtgct ttaatcaaaa gctgcaaagt tgtcactgct ttttttttt tcttaattgc 6000 1832 catcatatca agtgtactcc agagttagaa aggtttgcaa tactcaacat tatcttttc 6060 1833 aatgggcagg aggcaaaaaa aatcaagtgt ttctgtttat acctgattca actacttaaa 6120 1834 tagaggtaga ttggaataat acactgattg attgatgggt ggcattaaat ataaatctac 6180	1828	ggtggttgtt	ccctttggtg	gcttttttcc	ccccgtcttt	gagttgaaca	ctattgatga	5820
1831 ttggtgtgct ttaatcaaaa gctgcaaagt tgtcactgct ttttttttt tcttaattgc 6000 1832 catcatatca agtgtactcc agagttagaa aggtttgcaa tactcaacat tatcttttc 6060 1833 aatgggcagg aggcaaaaaa aatcaagtgt ttctgtttat acctgattca actacttaaa 6120 1834 tagaggtaga ttggaataat acactgattg attgatgggt ggcattaaat ataaatctac 6180	1829	gagtaagcat	tccaaaggat	aaattacagg	acactaaaac	aggtcatgat	gagcttaagc	5880
1832 catcatatca agtgtactcc agagttagaa aggtttgcaa tactcaacat tatcttttc60601833 aatgggcagg aggcaaaaaa aatcaagtgt ttctgtttat acctgattca actacttaaa61201834 tagaggtaga ttggaataat acactgattg attgatgggt ggcattaaat ataaatctac6180	1830	ggagagcagg	atttaacata	attggcataa	tgcttcattg	ttatcattgt	aacatgcctc	5940
1833 aatgggcagg aggcaaaaaa aatcaagtgt ttctgtttat acctgattca actacttaaa 6120 1834 tagaggtaga ttggaataat acactgattg attgatgggt ggcattaaat ataaatctac 6180	1831	ttggtgtgct	ttaatcaaaa	gctgcaaagt	tgtcactgct	tttttttt	tcttaattgc	6000
1834 tagaggtaga ttggaataat acactgattg attgatgggt ggcattaaat ataaatctac 6180	1832	catcatatca	agtgtactcc	agagttagaa	aggtttgcaa	tactcaacat	tatcttttc	6060
	1833	aatgggcagg	aggcaaaaaa	aatcaagtgt	ttctgtttat	acctgattca	actacttaaa	6120
1835	1834	tagaggtaga	ttggaataat	acactgattg	attgatgggt	ggcattaaat	ataaatctac	6180
	1835							

E-->

ctttatctcc agtgatgaga gttttatttc tcagcaaaag tgccaaggat aggtacatat 6240 tttctagcgt aatctctgaa

1837 <210> SEQ ID NO: 33 1838 <211> LENGTH: 1919

1839 <212> TYPE: DNA

1840 <213> ORGANISM: Homo sapiens

1842 <220> FEATURE:

1843 <221> NAME/KEY: mRNA

1844 <222> LOCATION: (1)...(1919)

1845 <223> OTHER INFORMATION: human p35srj (MRG1) 1847 <400> SEOUENCE: 33

1847	<400> SEQUE	NCE: 33					
1848	gtcctgccga	gctgtgaggg	caacggaggg	gaaataaaag	ggaacggctc	cgaatctgcc	60
1849	ccagcggccg	ctgcgagacc	tcggcgccga	catcgcgaca	gcgaagcgct	ttgcacgcca	120
1850	ggaaggtccc	ctctatgtgc	tgctgagccg	gtcctggacg	cgacgagccc	gccctcggtc	180
1851	ttcggagcag	aaatcgcaaa	aacggaagga	ctggaaatgg	cagaccatat	gatggccatg	240
1852	aaccacgggc	gcttccccga	cggcaccaat	gggctgcacc	atcaccctgc	ccaccgcatg	300
1853	ggcatggggc	agttcccgag	ccccatcac	caccagcagc	agcagcccca	gcacgccttc	360
1854	aacgccctaa	tgggcgagca	catacactac	ggcgcgggca	acatgaatgc	cacgagcggc	420
1855	atcaggcatg	cgatggggcc	ggggactgtg	aacggagggc	accccccgag	cgcgctggcc	480
1856	cccgcggcca	ggtttaacaa	ctcccagttc	atgggtcccc	cggtggccag	ccagggaggc	540
1857	tccctgccgg	ccagcatgca	gctgcagaag	ctcaacaacc	agtatttcaa	ccatcacccc	600
1858	tacccccaca	accactacat	gccggatttg	caccctgctg	caggccacca	gatgaacggg	660
1859	acaaaccagc	acttccgaga	ttgcaacccc	aagcacagcg	gcggcagcag	cacccccggc	720
1860	ggctcgggcg	gcagcagcac	ccccggcggc	tctggcagca	gctcgggcgg	cggcgcgggc	780
1861	agcagcaaca	gcggcggcgg	cagcggcagc	ggcaacatgc	ccgcctccgt	ggcccacgtc	840
1862	cccgctgcaa	tgctgccgcc	caatgtcata	gacactgatt	tcatcgacga	ggaagttctt	900
1863	atgtccttgg	tgatagaaat	gggtttggac	cgcatcaagg	agctgcccga	actctggctg	960
1864	gggcaaaacg	agtttgattt	tatgacggac	ttcgtgtgca	aacagcagcc	cagcagagtg	1020
1865	agctgttgac	tcgatcgaaa	ccccggcgaa	agaaatcaaa	ccccaactt	cttcggcgtg	1080
1866	aattaaaaga	aacattccct	tagacacagt	atctcacttt	tcagatcttg	aaaggtttga	1140





RAW SEQUENCE LISTING DATE: 01/15/2002 PATENT APPLICATION: US/10/024,607 TIME: 18:09:09

Input Set : A:\B08017231.txt

Output Set: N:\CRF3\01152002\J024607.raw

	1867	gaacttggaa	acaaagtaaa	ctataaactt	gtacaaattg	gttttaaaaa	aaattgctgc	1200
	1868	cactttttt	tcctgttttt	gtttcgtttt	tgtagccttg	acattcaccc	acctccctta	1260
	1869	tgtagttgaa	atatctagct	aacttggtct	ttttcgttgt	ttgtttttac	tcctttccct	1320
	1870	cactttctcc	agtgctcaac	tgttagatat	taatcttggc	aaactgctta	atcttgtgga	1380
	1871	ttttgtagat	ggtttcaaat	gactgaactg	cattcagatt	tacgagtgaa	aggaaaaatt	1440
	1872	gcattagttg	gttgcatgaa	ctttgaaggg	cagatattac	tgcacaaact	gccatctcgc	1500
	1873	ttcattttt	taactatgca	tttgagtaca	gactaatttt	taaaatatgc	taaactggaa	1560
	1874	gattaaacag	atgtggccca	aactgttctg	gatcaggaaa	gtcatactgt	tcactttcaa	1620
	1875	gttggctgtc	cccccgccg	cccccccca	ccccatatg	tacagatgat	aatagggtgt	1680
	1876	ggaatgtcgt	cagtggcaaa	catttcacag	attattttgt	ttctgtcttc	aacatttttg	1740
	1877	acactgtgct	aatagttata	ttcagtacat	gaaaagatac	tactgtgttg	aaagcctttt	1800
	1878	aggaaatttt	gacagtattt	ttgtacaaaa	catttttttg	aaaaaatact	tgttaattta	1860
	1879	ttctatttta	atttgccaat	gtcaataaaa	agttaagaaa	taaaaaaaaa	aaaaaaaa	1919
E>	1884	(-31-)	-					





VERIFICATION SUMMARY

DATE: 01/15/2002 PATENT APPLICATION: US/10/024,607 TIME: 18:09:10

Input Set : A:\B08017231.txt

L:1884 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:1919 SEQ:33

Output Set: N:\CRF3\01152002\J024607.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:503 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:3 L:554 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:4 L:578 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:18 L:578 M:252 E: No. of Seq. differs, <211>LENGTH:Input:5028 Found:4860 SEQ:9 L:1397 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 L:1835 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:17 L:1835 M:252 E: No. of Seq. differs, <211>LENGTH:Input:6324 Found:6180 SEQ:32